

Application No. 09/901,403

3COM 3148-1

REMARKS

In the Official Action mailed 29 March 2005, the Examiner objected to the Abstract. The Examiner reviewed claims 1-27. The Examiner has rejected claims 1, 2, 6-10, 12, 13, 17-21, 23, 25 and 26 under 35 U.S.C. §103(a); has rejected claims 11, 22 and 27 under 35 U.S.C. §103(a); and has objected to claims 3-5, 14-16 and 24 as being dependent upon a rejected base claim.

Applicant has amended claims 1, 12 and 23. Claims 1-27 remain pending.

The Examiner's rejections and objections are respectfully traversed below.

Objection to the Abstract

The Examiner has objected to the Abstract because it includes the title of the application. The Abstract has been amended herein to remove the title.

Accordingly, reconsideration of the objection to the Abstract as amended is respectfully requested.

Rejection of Claims 1, 2, 6-10, 12, 13, 17-21, 23, 25 and 26 under 35 U.S.C. §103(a)

The Examiner has rejected claims 1, 2, 6-10, 12, 13, 17-21, 23, 25 and 26 under 35 U.S.C. §103(a) as being unpatentable over Angle et al. (U.S. 6,519,225), in view of McAlpine (USPUB 20020141427). We note that McAlpine is cited in reliance on 35 U.S.C. §102(e). We do not waive the right to establish that it is not prior art by swearing behind it. However, for the purposes of this paper, we believe that the submission of evidence in that regard is unnecessary.

Applicant has amended claim 1, without loss of scope, to replace the term "the bidding" with the phrase "the bid data gathered from the plurality of arbitration units," which is believed to remove ambiguity in the meaning of "the bidding."

Angle et al. describes the prior art centralized arbitration system, in which the fabric configuration manager 110 determine priorities and computes the connection map for the fabric 120. Angle et al. does not therefore describe a system including "a plurality of arbitration units coupled with respective satellite switches..." as required by independent claim 1.

The Examiner cites column 4, lines 50-60 of Angle et al. in support of the position that Angle et al. teaches the "plurality of arbitration logic units..." However, the cited text of Angle et al. describes the centralized arbitration process using a single configuration manager 110.

The Examiner cites column 6, lines 62-66 of Angle et al. in support of the position that Angle et al. teaches a stage in which performance parameters are "gathered from other

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arbitration logic units...", as required in claim 1. However, the cited text states that the configuration manager 110 receives control information, such as back pressure signals, from the output ports. The output ports are not "arbitration logic units" and do not include "logic to control an arbitration cycle..." as stated in claim 1.

The Examiner cites column 7, lines 43-55 of Angle et al. in support of the position that Angle et al. teaches a stage in which bid data is "propagated among the plurality" of arbitration logic units. However, there is no such propagation process in Angle et al. because none is required. Rather the arbitration processing is centralized in the configuration manager 110. The cited text of Angle et al. describes the procedure by which input ports on the satellite line cards send a transmit request to the configuration manager. The input port is not an arbitration logic unit, and does not include "logic to control an arbitration cycle..." as stated in claim 1. Even if the input port did include logic supporting some arbitration functions, the transmit request does not satisfy the limitation "bid data". As stated in claim 1, the bid data includes "a set of bids for use of egress queues during the switch cycle, the bids in the set including a destination identifier indicating a destination egress queue in one of the plurality of switch satellites, and a pressure parameter indicating a result of a combination of the performance parameter of the destination egress queue with a condition of a source ingress queue." Therefore, the propagation of transfer requests from an input port in Angle et al. to the configuration manager does not satisfy the limitation in claim 1 relating to propagation of bid data among arbitration units in the plurality of arbitration units, as required in claim 1.

The Examiner takes the position that Angle et al. does not describe a pressure parameter as recited in claim 1, but relies on McAlpine to suggest such function. McAlpine describes an architecture with a plurality of local arbitrators that operation based on information "pertaining to its own local environment." See, McAlpine, page 9, paragraph [0080]. Therefore, it does not suggest propagating bid data among a plurality of arbitration logic units as claimed herein. McAlpine does suggest that the local arbiters communicate among themselves. However, there is no protocol described, no technique for applying shared data described and there is no process of propagation of bid data as claimed herein.

Therefore, Applicant submits that the combination of Angle et al. with McAlpine does not meet all elements of claim 1. The rejection of claim 1, based on this combination therefore should be withdrawn.

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Claim 2 and 6-10 depend from claim 1, and are patentable for at least the same reasons, and because of the inventive combinations recited.

Independent claim 12 is an method claim of scope similar to apparatus claim 1. The same clarifying amendment is made to claim 12. Furthermore, claim 12, and claims 13 and 17-21 are patentable for the reasons discussed above with respect to claims 1, 2 and 6-10.

~~Independent claim 23 is a method claim that describes a distributed arbitration process~~ unlike the cited prior art. It includes "gathering performance parameters in each switch satellite...", "sharing a bid data matrix among switch satellites..." and so on. There is no similar process described in the central arbitration architecture of Angle et al. and there is no similar process described in the local arbiter architecture of McAlpine. Indeed the concept of the "bid matrix" recited in claim 23 is not addressed by the Examiner in the Official Action. Claims 25 and 26 depend from claim 23 and are allowable for the reasons discussed above, and because of the unique combinations recited.

Accordingly, reconsideration of the rejection of claims 1, 2, 6-10, 12, 13, 17-21, 23, 25 and 26 as amended is respectfully requested.

Rejection of Claims 11, 22 and 27 under 35 U.S.C. § 103(a)

The Examiner has rejected claims 11, 22 and 27 under 35 U.S.C. §103(a) as being unpatentable over Angle in view of Magill et al. (U.S. 6,343,066).

Claims 11, 22 and 27 depend from claims 1, 12 and 23, respectively, and are patentable for at least the same reasons. The Magill et al. reference is relied upon to suggest "randomizing the order of bids..." as stated in claims 11, 22 and 27. The Examiner cites column 10, lines 23-30 of Magill to suggest the randomizing of the order. The cited section describes a process that organizes an overload condition according to "some predetermined sequence." A sequence that is "predetermined" is not necessarily random. Furthermore, Magill describes a central arbitration architecture (see, Fig. 2, "global scheduler 108"), and does not overcome the deficiencies in the combination of references described above.

Accordingly, reconsideration of the rejection of claims 11, 22 and 27 is respectfully requested.

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Allowable Subject Matter

The Examiner has objected to claims 3-5, 14-16 and 24 as being dependent upon a rejected base claim, but has indicated that these claims would be allowable if rewritten in independent form.

Applicant request reconsideration of the objection to such claims, in light of the arguments set forth above, establishing that the base claims are allowable.

Accordingly, reconsideration of the objection of claims 3-5, 14-16 and 24 is respectfully requested.

CONCLUSION

It is respectfully submitted that this application is now in condition for allowance, and such action is requested.

The Commissioner is hereby authorized to charge any fee determined to be due in connection with this communication, or credit any overpayment, to our Deposit Account No. 50-0869 (3COM 3148-1).

Respectfully submitted,

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